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| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | Not Assigned Yet |
| | | Filing Date | On even date herewith |
| | | First Named Inventor | AOTA, KINYA |
| | | Art Unit | 3635 |
| | | Examiner Name | R. Canfield |
| | | Attorney Docket Number | 503.35255V14 |
| Sheet | 1 | of | 2 |

| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------------------|--------------------------|--|------|--------------------------------|--|---|
| Examiner Initials ¹ | Cite No. ¹ | Document Number | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | | |
| BK | | US-5,388,529 | 1995 | | Tieberghien et al. | |
| | | US-5,979,742 | 1999 | | Enomoto et al. | |
| | | US-3,849,871 | 1974 | | Kaunitz | |
| | | US-5,794,835 | 1998 | | Colligan, et al. | |
| | | US-5,460,317 | 1995 | | Thomas, et al. | |
| | | US-5,140,913 | 1982 | | Takeichi, et al. | |
| | | US-5,098,007 | 1992 | | Tsuruda, et al. | |
| | | US- | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
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| Examiner Initials ¹ | Cite No. ¹ | Foreign Patent Document | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | | |
| BK | | JP 57-112813 | | 1980 | | | |
| | | JP 54-11250 | | 1979 | | | |
| | | JP 7-266068 | | 1995 | | | |
| | | JP 10-216964 | | 1998 | | | |
| | | JP 80-166177 | | 1985 | | | |
| | | JP 51-111925 | | 1975 | | | |
| | | JP 6-156272 | | 1994 | | | |
| | | JP 7-33016 | | 1996 | | | |
| | | JP 0 579 500 A1 | | 1994 | | | |
| | | WO 93/10835 | | 1993 | | | |

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| Examiner Signature | <i>Basil Katch</i> | Date Considered | 4/7/04 |
|-----------------------|--------------------|--------------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| Substitute for form 1449B/PTO | | C m p l t e i f K n w n | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | | Application Number | Not Assigned Yet |
| | | Filing Date | On even date herewith |
| | | First Named Inventor | AOTA, KINYA |
| | | Group Art Unit | 3635 |
| | | Examiner Name | R. Canfield |
| (use as many sheets as necessary) | | Attorney Docket Number | 503.35255V14 |
| Sheet | 2 | of | 2 |

| OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS | | | |
|---|-----------------------|--|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | Friction Stir Process Welds Aluminum Alloys, Welding Journal, American Welding Society, Vol. 75, No. 3 (1996) | |
| | | Light Metal Welding Vol. 33, No. 7, pp. 19-26 (1995) | |
| | | Two Prints dated June 23, 1993 showing details from a video from the Welding Institute | |
| | | Verksstaderna Nr 2, pp. 32 and 34 (1996) | |
| | | Advanced Materials & Processes, pp. 22-23, (1993) | |
| | | Metalworking Technology Europe, Sterline Publication, pp. 143-145, (1994) | |
| | | An Introduction to Friction Stir Welding and Its Development, by C.J. Dawes, Welding & Metal Fabrication, pp. 13-16, (1995) | |
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| Examiner Signature | <i>Barb Kahl</i> | Date Considered | 4/7/04 |
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